

# PROGRAMMABLE PACKET FILTERING IN A PRIORITIZED CHAIN

## ABSTRACT OF THE DISCLOSURE

An apparatus is equipped with classifier logic to programmably extract key data from a data packet of a data stream based upon a dynamically programmable offset, compare the key data with one or more lookup tables of key entries, and store the result of the comparison as at least part of a categorization vector. The apparatus is further equipped with filter logic coupled to the classifier logic to receive the categorization vector and to programmably determine group membership of the data packet based at least in part upon the categorization vector, as well as to dynamically determine a disposition for the data packet based at least in part upon the group membership.